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## BIOLOGY

## AAKASH INSTITUTE ENGLISH

## MORPHOLOGY OF FLOWERING PLANTS

Example

1. Name the different parts of a typical root

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2. Differentiate between : Fibrous root and adventitious root.

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3. Pneumatophores occur in

## D Watch Video Solution

4. What are root hairs?

## 5. What is stem?

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6. What are stolons? Give example.

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7. What are the main functions of a stem?

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8. What are the main parts of a leaf?
9. What is a the function of the petiole?

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10. What is inflorescence?

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11. What is a thalamus?

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12. Name the four whoris present in a flower.

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13. Differentiate between Epipetalous and epiphyllous

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14. Define the following ,

## Staminode

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15. Define the placentation
16. What are parthenocarpic fruits?

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17. The outermost layer of maize endosperm is known as

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18. Give an account of the inflorescence seen in the members of Solanceae family.
19. Give the floral formula of the potato family.

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Exercise

1. Thick roots arising in Ficus to support heavy branches are called
A. Stilt roots
B. Prop roots
C. Assimilatory roots
D. Floating roots

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2. In Amorphophallus and Crocus vegetative reproduction occurs by means of
A. a) Offset
B. b) Rhizome
C. c) Corm
D. d) Both (1) \& (2)

## Answer: C

## 3. Stem tendrils occur in

A. Cucumber
B. Watermelon
C. Pumpkin
D. All of these

## Answer: D

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4. Thorn is a stem structure because it
A. Develops from stipule
B. Arises from leaf directly
C. Develops from axillary bud
D. is structure of defence

## Answer: C

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5. A. Cells of root meristematic zone has dense cytoplasm.
B. Chrysanthemum, Pineapple and jaseminum are examples of sucker. C. A fleshy bud is called bulbil. D. Root
cap is absent in hydrohytes.
A. All are correct
B. All are correct, except B
C. A \& B are correct
D. B \& C are correct

## Answer: A

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6. Reduced, discoid and underground stem is found in
A. Ginger
B. Turmeric
C. Potato
D. Onion

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7. Find odd one w.r.t. plants having green succulent stem
A. Opuntia
B. Euphorbia
C. Citrus
D. Both 1 and 2

## Answer: C

8. All given modification belong to adventitious roots, except
A. Reproductive root of Asparagus
B. Storage roots of sweet potato
C. Conical roots of carrot
D. Prop roots of banyan tree

## Answer: C

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9. Which of the following function is not performed by undergournd stem?
A. Reproduction
B. Assimilation
C. Perennation
D. Storage

Answer: B

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10. Bud associated with the underground stem of potato is
A. Axillary
B. Apical
C. Adventitious
D. internodal

## Answer: A

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11. Leaf base expands into a sheath in
A. Grasses
B. Legumes
C. Prickly poppy
D. Mimosa

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12. Select and incorrect match:
A. Uniphinnate leaf-Neem
B. Unifoliate leaf-silk cotton tree
C. Bipinnate leaf-Mimosa
D. Simple leaf-Banyan

Answer: B

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13. The petiole modified into leaf like structure is known
as
A. Phylloclade
B. Cladode
C. Cladophyll
D. Phyllode

## Answer: D

## - Watch Video Solution

14. More than two leaves are present at each node in
A. Aistonia
B. Sunflower
C. Guava
D. Mustard

## Answer: A

- Watch Video Solution

15. Leaf tendril is not seen in
A. Pisum
B. Lathyrus
C. Cucurbits
D. Nepenthes

Answer: C

## - Watch Video Solution

16. Pendulous spike in leaf axis that bears unisexual
flowers is called
A. Panicle
B. Catkin
C. Spikelet
D. Raceme

Answer: B
17. Select an incorrect statement w.r.t. capitulum inflorescence of sunflower
A. Main axis becomes a flat receptacle
B. Florets are sessile and many in number
C. Ray florets are bisexual
D. Disc florets are actinomorphic

Answer: C

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18. Select an incorrect match:
A. Phyllode-Acacia
B. Leaf spine-Pea
C. Storage leaf-Onion
D. Leaf pitcher-Nepenthes

## Answer: B

## D Watch Video Solution

19. All given statement w.r.t. cymose infloresence are correct except
A. Centrifugal opening pattern of flowers
B. Unlimited growth of axis
C. Main axis terminates in a flower
D. Basipetal arrangement of flowers.

## Answer: B

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20. Stamens represent the male flowers ad pistil represents a female flower in
A. Cyanthium
B. Spadix
C. Verticillaster
D. Hypanthodium.

## - Watch Video Solution

21. Flower in angiosperms
A. Is a modified reproductive shoot
B. Possess different floral appendages at successive
nodes
C. Have floral appendages which are modified leaves
D. More than one option is correct.

## Answer: D

22. Which of the following aestivation involves nonuniform overlapping of petals?
A. Valvate
B. Twisted
C. Imbricate
D. Contorted

Answer: C

## - Watch Video Solution

23. Find odd one w.r.t. zygomorphic flower
A. Mustard
B. Pea
C. Glumohur
D. Bean

Answer: A

## D Watch Video Solution

24. Stamens fused with petals are known as
A. Lily
B. Calotropis
C. China rose
D. Verbena

## Answer: C

## - Watch Video Solution

25. Tricarpellary, syncarpous condition is found in
A. Lotus and rose
B. Mustard and tomato
C. Mustard and lotus
D. Rose and tomato

Answer: B
26. Large posterior petal is chracteristic to vexillary aestivation found in members of
A. Solanaceae
B. Lillaceae
C. Fabaceae
D. Malvaceae

## Answer: C

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27. When the stamens are united throughout their whole
length by filaments and anthers the condition is known as
A. Monoadelphous
B. Diadelphous
C. Polyandrous
D. Polyadelphous.

## Answer: D

- Watch Video Solution

28. In which placentation type , the ovary is two to many chambered and the ovules arise from central axis?
A. Axile
B. Marginal
C. Parietal
D. Basal

## Answer: A

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29. Select a correct match:
A. Didynamous stamen-Cassia
B. Tetradynamous stamen-Mustard
C. Epiphyllous condition-China rose
D. Syngenesious condition-Cucumber

## Answer: B

## - Watch Video Solution

30. Flower is perigynous and the ovary is said to be half inferior in
A. Rose
B. Peach
C. Pisum
D. All of these

## Answer: D

## - Watch Video Solution

31. Choose odd one w.r.t. parthenocarpic fruit
A. Mango
B. Banana
C. Oranges
D. Grapes

## - Watch Video Solution

32. Fruit developed from monocarpellary, superior and unilocular ovary, where the pericarp is fully fused with seed coat is
A. Follicle
B. Caryopsis
C. Achene
D. Capsule

Answer: B
33. All given are dry furits, except
A. Legume
B. Capsule
C. Caryopsis
D. Berry.

## Answer: D

## - Watch Video Solution

34. Which type of aestivation is found in Pea?
35. What is the edible part in apple fruit ?
A. Bract
B. Thalamus
C. Cotyledon
D. Endosperm

Answer: B

## - Watch Video Solution

36. Mesocarp and endocarp are edible in
A. Pomegranate
B. Banana
C. Coconut
D. Mango

## Answer: B

## (D) Watch Video Solution

37. Syconus fruit develops from
A. Achenes
B. Nuts
C. Cocci
D. Samara

## Answer: A

## - Watch Video Solution

38. Aleurone layer of maize seed stores $\qquad$ and is in ploidy.
A. Proteins , n
B. Cellulose, 2 n
C. Proteins,3n
D. Fat, 3 n
39. Find odd one w.r.t. non-endospermic seeds
A. Gram
B. Groundnut
C. Pea
D. Castor

Answer: D

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40. $X$ is scar on the seed coat through which the following seeds were attached to the fuit, above the $X$ is a small pore called Y . Indetify $X$ and $Y$ and select the correct option .
A. Hilum
B. kemel
C. Epicotyl
D. Caruncle

## Answer: A

41. Which of the given symborl represents epitepalous condition?
A.
(1) $C A$
B.
(2) $\overparen{P A}$
C. ${ }^{(3)} \overparen{K} A$
D. $\%$

## Answer: B

## - Watch Video Solution

42. $C_{\times 4} A_{2+4}$ condition is characteristic to
A. Asteraceae
B. Brassicaceae
C. Fabaceae
D. Lillaceae

## Answer: B

## D Watch Video Solution

43. Select an incorrect match:
A. Indigofera -Fabaceae
B. Helianthus-Asteraceae
C. Capsicum-Malvaceae

## D. Aloe-Liliaceae

## Answer: C

## - Watch Video Solution

44. To which family the given plants belong?

Pisum sativum

## - Watch Video Solution

45. Mark the incorrect option (w.r.t. Floral formula of lily
family)
A. $A_{(6)}$
B. $o(\rightarrow)$
C. $G_{(3)}$
D. $\oplus$

## Answer: A

## - Watch Video Solution

46. Obliquely placed ovary, swollen placenta and epipetalous stamens are features of family
A. Solanaceae
B. Liliaceae
C. Fabaceae

D. Brassicaceae

## Answer: A

## - Watch Video Solution

47. Which of the given is/are fodder plants of fabaceae?
A. Sesbania
B. Trifolium
C. Witharia
D. More than one option is correct.
48. 

Floral
formula

belongs to
family
A. Solanaeceae
B. Brassicaceae
C. Fabaceae
D. Liliaceae

## Answer: C

49. Mark the odd one (w.r.t. poaceae)
A. Orchids
B. Avena
C. Pennisetum.
D. Secale

Answer: A

## - Watch Video Solution

50. An ornamental plant belonging to the family Liliaceae is :
A. Lupin
B. Gloriosa
C. Sweet pea
D. Belladonna

## Answer: B

## D Watch Video Solution

## Assigement Section A Objective Type Questions

1. Primary root is the direct elongation of the
A. Pedical
B. Radicle
C. Plumule
D. Stamen

## Answer: B

## - Watch Video Solution

2. The type of roots present in mustard plant is
A. Fibrous roots
B. Adventitious roots
C. Tap roots
D. Nodulated roots

Answer: C

## - Watch Video Solution

3. Which of the following is not the lateral branches of the roots?
A. Tertiary roots
B. Secondary roots
C. Primary root
D. More than one option is correct.

## Answer: C

4. In wheat plant $\qquad$ root system is present.
A. Nodulated
B. Tap
C. Fibrous
D. Prop

## Answer: C

## - Watch Video Solution

5. Which of the following is not the main function of the root sytem?
A. Provide anchorage to the plant parts
B. Synthesis of PGRs
C. Absorption of water and minerals from soil
D. Photosynthesis

## Answer: D

## D Watch Video Solution

6. Which of the following region of root is responsible for the growth of the root in length?
A. Root cap
B. Region of meristematic activity
C. Region of elongation
D. Region of maturation.

## Answer: C

## - Watch Video Solution

7. Root hairs develop from the the region of
A. Region of elongation
B. Region of maturation
C. Region of meristemati activity
D. Root cap.

## - Watch Video Solution

8. The region or part of root that increases the sruface area for water absorption is
A. Root cap
B. Zone of elongation
C. Meristematic zone
D. Root hair

## Answer: D

9. The tap roots of ____ gets modified to store food.
A. Carrot
B. Onion
C. Ginger
D. Sweet potato

Answer: A

## - Watch Video Solution

10. Adventitious roots of get swollen and store
A. Carrot
B. Tumip
C. Radish
D. Sweet potato

## Answer: D

## - Watch Video Solution

11. Supporting roots coming out of the tower nodes of the sugarcane stem are called
A. Prop roots
B. Stilt roots
C. Pneumatophores

## D. Fusiform roots

## Answer: B

## - Watch Video Solution

12. In Rhizophora, roots are modified to form
A. Tuberous roots
B. Pneumatophores
C. Stilt roots
D. Storage roots

Answer: B
13. The adventitious, mechanical, freely, vertically hanging downwards roots from stem of Banyan tree are called
A. Prop roots
B. Stilt roots
C. Pneumatophores
D. Root hair

## Answer: A

- Watch Video Solution

14. Stem develops from $\qquad$ of the embryo of a germinating seed.
A. Radicle
B. Plumule
C. Pedicel
D. Pneumatophore

Answer: B

## D Watch Video Solution

15. $\qquad$ are the regions of the stem that bear leaves.
A. internode
B. Nodes
C. Follar bud
D. Radical bud

Answer: B

## - Watch Video Solution

16. Stems of potato, ginger and turmeric are modified to
A. Respiration
B. Perform phosynthesis
C. Store food
D. Provide support

## Answer: C

## - Watch Video Solution

17. In gourds, axillary buds develop spirally coiled structures called
A. Throns
B. Tendril
C. Offsets
D. Suckers
18. ______ protect Bougainviliea from grazing animals.
A. Tendrils
B. Suckers
C. Offsets
D. Thorns

Answer: D

- Watch Video Solution

19. Stems are modified into flattened structures, which carryout photosynthesis in
A. Euphorbia
B. Opuntia
C. Bougainvillea
D. Colocasia

## Answer: A

## - Watch Video Solution

20. Chlorophyll containing fleshy cylindrical structure found in Euphrobia re modified
A. Roots
B. Fruit
C. Leaves
D. Stem

## Answer: D

## D Watch Video Solution

21. Chlorophyll containing fleshy cylindrical structure found in Euphrobia re modified
A. Roots
B. Fruit
C. Leaves
D. Stem

## Answer: D

## - Watch Video Solution

22. Leaves originate from $\qquad$ and are arranged in an order.
A. Root apical meristem, acrospetal
B. Floral meristem, basipetal
C. Shoot apical meristem, acropetal
D. Internodes, basipetal.

Answer: C

## D Watch Video Solution

23. Which of the following is not part of a leaf?
A. pedicel
B. Leaf base
C. petiole
D. Lamina

Answer: A

D Watch Video Solution
24. Leaf base may bear two lateral small leaf like structures called
A. Lamina
B. Pulvinus
C. Stipules
D. Sepals

## Answer: C

## - Watch Video Solution

25. Swollen leaf base found in leguminous plants is called
B. Petiole
C. Stipules
D. Pulvinus

## Answer: D

## - Watch Video Solution

26. Name two plants that show alternate phyllotaxy.
A. Sunflower
B. Guava
C. Nerium
D. Calotropis

## D Watch Video Solution

27. The petiole expand and become green to syntesize

## food in

A. Solanum
B. Opisum sativum
C. Venus-fly trap
D. Australian Acacia

Answer: D
28. Mark the incorrect statement
A. Flower is a modified shoot
B. In cymose inflorescence, the main axis terminates
in a flower.
C. Flowers are borne on successive internodes on the
stems and roots
D. When shoot tip transforms into flower, the flower
is always solitary

## Answer: C

29. The four wholes of a flower are arranged on the
A. Thalamus
B. Petiole
C. Corolla
D. Stamens

Answer: A

## - Watch Video Solution

30. Radial symmetry is found in the flowers of
A. Cassia
B. Chilli
C. Gulmohur
D. Canne

## Answer: B

## - Watch Video Solution

31. The flower of which of the following plant is zygomorphic?
A. Bean
B. Datura
C. Mustard
D. Canne

## Answer: A

## - Watch Video Solution

32. Which of the following plant has a superior ovary?
A. Peach
B. Guava
C. China rose
D. Rose

Answer: C
33. Which of the following plant has epigynous flower?
A. Cucumber
B. Brinjal
C. Mustard
D. Peach

Answer: A

- Watch Video Solution

34. The ray florets of sunflower has
A. Superior ovary
B. Half inferior ovary
C. Half superiks ovary
D. Inferior ovary.

## Answer: D

## - Watch Video Solution

35. To which family Jatropha belongs?
36. Match the column-1 with column-ii w.r.t. aestivation
Column-I

## Column-ll

(i) Valvate
(ii) Vexillary
(iii) Twisted
(iv) Imbricate
A. a-ii,b-i,c-iv,d-iii
B. $a-i i i, b-i i, c-i v, d-i$
C. a-iv,b-ii,c-iii,d-i

## D. $a-i, b-i i i, c-i v, d-i i$

## Answer: D

## - Watch Video Solution

37. Carpels are fused in the flowers of
A. Lotus and rose
B. Tomato
C. Rose
D. Both $1 \& 3$

Answer: B
38. Ovary containing the false septum occurs in
A. Primrose
B. Dianthus
C. Argemone
D. Pisum sativum

Answer: C

## - Watch Video Solution

39. In Placentation, the placenta forms a ridge
A. Axile
B. Basal
C. Free central
D. Marginal

## Answer: D

## - Watch Video Solution

40. The stony hard part of the mango represents
A. Mesocarp
B. Epicarp
C. Endosperm

## D. Endocarp

## Answer: D

## - Watch Video Solution

41. Select the correct statement w.r.t. Mango and coconut
A. They develop from monocarpellary superior ovaries
B. They develop from monocarpellary inferior ovaries
C. They have fibrous epicarp
D. They have fleshy edible mesocarp
42. The inner layer of the seed coat is called
A. Testa
B. Hilum
C. Micropyle
D. Tegmen

Answer: D

- Watch Video Solution

43. Which of the following parts of the embryo contains
radicle and plumule?
A. Cotyledon
B. Seed coat
C. Embryonal axis
D. Endosperm

## Answer: C

## - Watch Video Solution

44. Which of the following plant has endospermic seed?
A. Bean
B. Gram
C. Pea

D. Castor

## Answer: D

## - Watch Video Solution

45. While representing a floral formula. G stands for
A. Gynoecium
B. Superior ovary
C. inferior ovary
D. Androecium

Answer: B
46. Select the correct option

|  | Column-I |
| :--- | :--- |
| a. Br | (i) Column-ll |
| b. K | (ii) Perolla |
| c. C | (iii) Calyx |
| d. P | (iv) Bracteate |

A. $a-i v, b-i i, c-i i i, d-i$
B. $a-i v, b-i, c-i i i, d-i i$
C. a-iv,b-ii,c-i,d-ii
D. $a-i, b-i i, c-i i i, d-i v$

Answer: C
47. Actinomorphic nature of flower is represented by which of the following symbols?
A. A
B. \%
C. $\oplus$
D. (4) 6

Answer: C

## - Watch Video Solution

48. Floral formula of family fabaceae is
A.
(1) $\oplus \dot{\varphi} K_{G S} C_{12,2: 4} A_{0 p r} G_{1}$

C. ${ }^{(3)} \oplus \oint \mathrm{K}_{5} \mathrm{C}_{122 \cdot 2} \mathrm{~A}_{021} \underline{G}_{1}$


## Answer: D

## (D) Watch Video Solution

49. The floral formula of solanaceae (Chilli) is
A. (1) $\oplus \underset{q}{ } K_{5} C_{5} A_{5} \bar{G}_{2}$
B. ${ }^{(2)} \oplus \zeta^{\prime} K_{(9)} C_{(9)} A_{(5)} G_{(2)}$
C. ${ }^{(3) \oplus} \oplus \mathrm{K}_{(5)} \stackrel{C_{(5)} \mathrm{A}_{5} \underline{G}_{(2]}}{ }$

## D.

## Answer: C

## - Watch Video Solution

50. Which of the following plants is used to extract the blue dye?
A. Trifolium
B. Lupin
C. Indigofera
D. Cassia

## - Watch Video Solution

## Section B Objective Type Questions

1. The origin of root hairs and lateral roots is , respectively,
A. Exogenous and endogenous respectively
B. Endogenous and exogenous respectively
C. Both endogenously
D. Both exogenously
2. Find odd one w.r.t. radicle leaves
A. Maize
B. Radish
C. Carrot
D. Tumip

## Answer: A

## - Watch Video Solution

3. Cussuta, Viscum and Orobanche are similar in having
A. Hygroscopic roots
B. Assimilatory roots
C. Epiphyllous roots
D. Haustorial roots

## Answer: D

## - Watch Video Solution

4. Match the following

| Column I | Column II |
| :--- | :--- |
| a. Cuscuta | (i) Hygroscopic root |
| b. Rhizophora | (ii) Stilt root |
| c. Vanda | (iii) Haustorial root |
| d. Pandanus | (iv) Respiratory root |

Column II
(i) Hygroscopic root
(ii) Still root
(iii) Haustorial root
(iv) Respiratory root
A. a-i,b-iii,c-iv,d-ii
B. $a-i i i, b-i v, c-i, d-i i$
C. a-iii,b-i,c-iv,d-ii
D. $a-i i, b-i v, c-i, d-i i i$

## Answer: B

## - Watch Video Solution

5. Modified stem into green, flattened branches of unlimited growth for assimilatory function is called
A. Phyllode
B. Phylloclade
C. Cladode
D. Bulbil

## Answer: B

## - Watch Video Solution

6. Leafless stem of onion which produces cluster of terminal flowers is called
A. Peduncle
B. Floral axis
C. Scape
D. Rachis

Answer: C

## - Watch Video Solution

7. Which is not a modification of stem ?
A. Tuber of potato
B. Pitcher of Napenthes
C. Corn of Colocasia
D. Rhizome of ginger

Answer: B

- Watch Video Solution

8. Reticulate venation is the feature of dicots but some monocots also exhibits this venation. The one following this type of vennation is
A. Calophllum
B. Smilax
C. Eryngium
D. Corymbium

## Answer: B

## D Watch Video Solution

9. Thorns, spines and prickles in plants work as
A. Respiratory organs
B. Excretory organs
C. Organs of offense
D. Defensive organs

## Answer: D

## - Watch Video Solution

10. Leaflet tendril and entire leaf tendril are found in respectively.
A. Cucurbita,Smilax
B. Pisum,Lathyrus aphaca
C. Passiflora,vitis
D. Luffa,Pisum

## Answer: B

## - Watch Video Solution

11. Select an incorrect match
A. Whorled phyllotaxy-Alstonia,Nerium
B. Decussate phyllotaxyQuisqualis, Psidium,Syzygium
C. Alternate phyllotaxy-Mustard,China rose, Sunflower
D. Opposite phyllotaxy -Zinnia,Calotropis

## - Watch Video Solution

12. Which of the following is not the modification of leaf?
A. Tendril in Antigonon
B. Tendril in Clematis
C. Tendril in Gloriosa
D. Tendril in Nepenthes

Answer: A

## - Watch Video Solution

13. Select a correct set.

Plant Organ Function<br>A. Vanda Tap root Moisture absorption<br>Plant Organ Function<br>B.<br>Jasmine Offset Photosynthesis<br>Plant Organ Function<br>C. Pineapple Sucker Propagation<br>D.<br>Plant Organ Function<br>Nepenthes Leaftip Photosynthesis

## Answer: C

## D Watch Video Solution

14. Inflorescence with thick, fleshy axis and large-colored bract is
A. Spathe
B. Spadix
C. Spikelet
D. Hypanthodium.

## Answer: B

## - Watch Video Solution

15. Bisexual sessile and bracteates flowers developing acropetally in
A. Raceme
B. Panicle
C. Spike

## D. Corymbium

## Answer: C

## - Watch Video Solution

16. What type of inflorescence does the given figure show
?

A. Simple dichasial cymose
B. Verticilaster
C. Simple monochasial cymose
D. Polychasial cymose

## Answer: B

## - Watch Video Solution

17. Find the odd one (w.r.t. inflorescence axis elongation)
A. Umbel
B. Spike
C. Raceme
D. Catkin

## - Watch Video Solution

18. The type of inflorescence characterized by having dimorphic flower is
A. Catkin
B. Umbel
C. Corymb
D. Capitulum

## Answer: D

19. In Head or Capitulum inflorescence
A. Ray florets: pistillate and neuter, actinomorphic
B. Disc florets: bisexual, zygomorphic
C. Ray florets: plstillate or neuter, zygomorphic
D. Disc florets: pistillate, actinomorphic

## Answer: C

## - Watch Video Solution

20. Monoadelphous condition and pentacarpellary ovary
are present in
A. China rose family
B. Pea family
C. Potato family
D. Yucca family

## Answer: A

## - Watch Video Solution

21. A. Citrus and Ricinus have synandrous condition.
B. In epitepalous condition, the cohesion occurs between
tepal and filament of stamen.
C. Tetradynamous condition consists of two long and
four short stamen filaments.
A. All are incorrect
B. Only A is incorrect
C. Only C is incorrect
D. Only B is incorrect.

## Answer: A

## D Watch Video Solution

22. Presence of staminode is characteristic feature of
A. Caesalpinoideae
B. Mimosoideae
C. Arecaceae

## D. uphorblaceae

## Answer: A

## - Watch Video Solution

23. Match the following

Column I Column II
a.Amphisarca
(i) Aegle
b.Pepo
(ii) Cucumis
c.Drupe
(iii) Ananas
d.Sorosis
(iv)Juglans
A. a-i,b-ii,c-iv,d-iii
B. a-i,b-ii,c-iii,d-iv
C. a-iii,b-ii,c-i,d-iv

## D. a-ii,b-i,c-iv,d-iii

## Answer: A

## - Watch Video Solution

24. Find incorrect matching
A. Pome-Fleshy thalamus
B. Schizocarp-Mericarp
C. Balausta-Aril
D. Syconus-Hypanthodium

Answer: C
25. Most common fruits of fabaceae and brassicaceae are respectively
A. Lomentum and Siliqua
B. Legume and Samara
C. Lomentum and Silicula
D. Legume and Siliqua

## Answer: D

- Watch Video Solution

26. In Coriandrum, the prolongation of thalamus beyond the carpel is called as
A. Gynophore
B. Gynandrophore
C. Androphore
D. Carpophore

## Answer: D

## D Watch Video Solution

27. Dry indehiscent single-seeded fruit formed from bicarpellary syncarpous inferior ovary is
A. Capsule
B. Siliqua
C. Achene
D. Lomentum

## Answer: A

## D Watch Video Solution

28. Scutellum is:
A. Food storing haploid structure in grass embryo
B. Remnant of cotyledon in maize
C. Shield shaped and large cotyledon of grasses
D. Protective covering of plumule in grasses

## Answer: C

## - Watch Video Solution

29. There are given some plants below, select among the options that, to how many families they belong? Plants are-Crotolaria, Atropa, Solanum, Arachis, Bambusa and Chrysanthemum
A. 4 families
B. 6 families
C. 2 families

D. 3 families

## Answer: A

## - Watch Video Solution

30. Floral formula

represents which one of the following groups of family ?
A. Crotolaria and Astragalus
B. Lepidium and Iberis
C. Allium and Asparagus
D. Vetiveria and Cymbopogon

## Answer: C

## - Watch Video Solution

31. Find correct match

Colum̃n I
Column II
(i) Liliaceae
(ii) Brassicaceae
c. Atropine
d. Aloin
a. Sinigrin
b. Carthamin
(iii) Solanaceae
(iv) Asteraceae
A. a-ii,b-iv,c-iii,d-i
B. a-ii,b-iv,c-i,d-iii
C. a-i,b-ii,c-iii,d-iv

## D. $a-i, b-i i, c-i v, d-i i i$

## Answer: A

## - Watch Video Solution

32. Find out a set of common $N_{2}$ fixing fodder plants
A. Trifolium, Atropa
B. Withania, Abrus
C. Sesbania, Trifollum
D. Aloe,Gloriosa

Answer: C

## 33. Family Fabaceae has

A. Diadelphous stamen, marginal placentation obliquely placed ovary and vexillary corolla
B. Diadelphous stamen, marginal placenta and large posterior petal
C. Bsal placentation, versatile stamens, spikelet inflorescence
D. Axile placentation, non-endospermic seed, legume
fruit.

## - Watch Video Solution

34. Butterfly shapped corolla, monocarpellary ovary and zygomorphic flowers are found in family
A. Caesalpinoideae
B. Solanaceae
C. Papilionaceae/Fabaceae
D. Graminae

## Answer: C

## - Watch Video Solution

35. Most primitive and advanced families of dicots are respectively
A. Solanaceae and Asteraceae
B. Leguminosae and Poaceae
C. Ranuculaceae and Asteraceae
D. Asteraceae amd Cucurbitaceae

Answer: C

## - Watch Video Solution

Section C Objective Type Questions

1. The term polyadelphous is related to
A. Gynoecium
B. Androecium
C. Corolla
D. Calyx

## Answer: B

## - Watch Video Solution

2. Many plants among Indigofera, Sesbania, Salvia, Allium,

Aloe, mustard, groundant,radish,gram and turnip have stamens with different length in their flowers
A. Three
B. Four
C. Five
D. Six

## Answer: B

## - Watch Video Solution

3. Radial symmetry is found in the flowers of
A. Brassica
B. Triflolium
C. Pisum

D. Cassia

## Answer: A

## - Watch Video Solution

4. Free-central placentation is found in
A. Dianthus
B. Argemone
C. Brassica
D. Citrus

Answer: A

## 5. Match Column-I with Column-II and select the correct

 option using the codes given belowColumn-1 Column-II
a. Pistils fused together (i) Gametogenesis
b. Formation of gametes(ii) Pistillate
c. Hyphae of higher
(iii) Syncarpous

Ascomycetes
d. Unisexual female (iv) Dikaryotic flower
A. a-iv,b-iii,c-i,d-ii
B. $a-i i, b-i, c-i v, d-i i i$
C. a-i,b-ii,c-iv,d-iii
D. $a-i i i, b-i, c-i v, d-i i$

## - Watch Video Solution

6. Cotyledon of maize grain is called
A. Scutellum
B. Plumule
C. Coleorhiza
D. Coleoptile

## Answer: A

7. Tricarpellary syncarpous gynoecium is found in flowers of
A. Poaceae
B. Liliaceae
C. Solanaceae
D. Fabaceae

## Answer: B

## - Watch Video Solution

8. Which of the following is not a stem modifi- cation
A. Flattened structure of Opuntia

## B. Pitcher of Nepenthes

C. Thorns of citrus
D. Tendrils of cucumber.

## Answer: B

## - Watch Video Solution

9. Stems modified into flat green organs performing the functions of leaves are known as
A. Scales
B. Cladoodes
C. Phyllodes
D. Phyllociades

## Answer: D

## - Watch Video Solution

10. The standard petal of a papilionaceous corolla is also called
A. Corona
B. Carina
C. Pappus
D. Vexillum

## - Watch Video Solution

11. Among China rose, mustard, brinjal, potato, guava, cucumber, onion and tulip, how many plants have superior ovary?
A. Four
B. Five
C. Six
D. Three

## Answer: C

12. Flowers are unisexual in
A. Onion
B. Pea
C. Cucumber
D. China rose

## Answer: C

## - Watch Video Solution

13. Leaves become modified into spines in

## A. Silk Cotton

B. Opuntia
C. Pea
D. Onion

## Answer: B

## - Watch Video Solution

14. Keel is the characteristic feature of flower of
A. Tomato
B. Tulip
C. Indigofera
D. Aloe

Answer: C

## D Watch Video Solution

15. Perigynous flowers are found in
A. Rose
B. Guava
C. Cucumber
D. China rose

## Answer: A

# $\oplus \underset{+}{\sigma_{(5)}} \mathrm{K}_{(5)} \mathrm{C}_{(5)} \mathrm{A}_{5} \mathrm{G}_{(2)}$ 

16. 

floral formula of
A. Brassica
B. Allium
C. Sesbania
D. Petunia

Answer: D
17. Which one of the following statements is correct
A. The seed in grasses is not endospermic
B. Mango is a parthenocarpic fruit
C. A protenaceous aleurone layer is present in maize
grain.
D. A sterile pistil is called a staminode.

## Answer: C

## D Watch Video Solution

18. An example of edible underground stem is
A. Carrot
B. Groundrnut
C. Sweet potato
D. Potato

## Answer: D

## - Watch Video Solution

19. Placenta and pericarp are both edible portions in
A. Apple
B. Banana
C. Tomato

D. Potato

## Answer: C

## - Watch Video Solution

20. When the margins of sepals or petals over- lap one another without any particular direction, the condition is termed as
A. Vexillary
B. Imbricate
C. Twisted
D. Valvate

## - Watch Video Solution

21. An aggregate fruit is one which develops from
A. Multicarpellary syncarpous gynoecium
B. Multicarpellary apocarpous gynoeclum
C. Complete inflorescence
D. Multicarpellary superior ovary.

## Answer: B

## - Watch Video Solution

22. Non-albuminous seed is produced in
A. Maize
B. Castor
C. Wheat
D. Pea

## Answer: D

## - Watch Video Solution

23. Seed coat is not thin, membranous in
A. Coconut

## B. Groundnut

C. Gram
D. Maize

## Answer: A

## D Watch Video Solution

24. Among bitter gourd. Mustard, brinjal, pumpkin, chinarose, lupin, cucumber, sunnehemp, gram, guava, bean, chilli, plum,petunia, tomato, rose,withania, potato, onion, aloe and tulip how many plants have hypogynous
flower
A. Ten

B. Fifteen

C. Eighteen
D. Six

## Answer: B

## - Watch Video Solution

25. In china rose the flowers are
A. Actionomorphic, epigynous with valvate aestivation
B. Zygomorphic, hypogynous with imbricate aestivation.
C. Zygomorphic, epigynous with twisted aestivation
D. Actinomorphic, hypogynous with twisted aestivation.

## Answer: D

## - Watch Video Solution

26. Placentatinon in tomato and lemon is
A. Marginal
B. Axile
C. Parietal
D. Free central

## D Watch Video Solution

27. Vexillary aestivation is characteristic of the family
A. Solanaceae
B. Brassicaceae
C. Fabaceae
D. Asteraceae

## Answer: C

28. Phyllode is present in
A. Australian Acacia
B. Opuntia
C. Asparagus
D. Euphorbia

## Answer: A

## - Watch Video Solution

29. How many plants in the list given below have composite fruits that develop from an inflorescence ?

Walnut, poppy, radish , fig, pineapple, apple, tomato, mulbery
A. Two
B. Three
C. Four
D. Five

Answer: B

## - Watch Video Solution

30. How many plants in the list given below have composite fruits that develop from an inflorescence?

Walnut, poppy, radish , fig, pineapple, apple, tomato, mulbery
A. Two
B. Three
C. Four
D. Five

## Answer: C

## - Watch Video Solution

31. Which one of the following organisms is correctly matched with its three characteristics ?
A. Pea: $C_{3}$ pathway, Endospermic seed, Vexillary aestivation
B. Tomato: Twisted aestivation, Axile placentation,

Berry
C. Onion: Bulb, Imbricate aestivation, Axile
placentation
D. Maize: $C_{3}$ pathway, Closed vascular bundles,

## Scutellum

## Answer: D

32. How many plants in the list given below have marginal placentation ?

Mustard, Gram, Tulip, Asparagus, Arhar, Sun hemp, Chilli, Colchicine, Onion, Moong, Pea, Tobacco, Lupin
A. Four
B. Five
C. Six
D. Three

## Answer: C

33. The "eyes" of the potato tube are
A. Axiliary buds
B. Root buds
C. Flower buds
D. Shoot buds

Answer: A

## - Watch Video Solution

34. Which one of the following statements is correct?
A. Flower of tulip is a modified shoot
B. In tomato, fruit is a capsule
C. Seeds of orchids have oil-rich endosperm
D. Placentation in Primose is basal.

## Answer: A

## - Watch Video Solution

35. The plants belonging to the family Solanaceae is represented by the floral formula
(1) $\oplus$ f $^{\circ} \mathrm{K}_{5} \mathrm{~K}_{5} \mathrm{~A}_{(5)} \mathrm{G}_{3}$
A.
B. (2) $\oplus \neq \mathrm{K}_{(5)} \mathrm{C}_{5} \mathrm{~A}_{(5)} \mathrm{G}_{(2)}$
C. (4) $\oplus \neq \mathrm{K}_{(5)} \mathrm{C}_{(5)} \mathrm{A}_{[55} \mathrm{G}_{2}$
D. (4) $\oplus \neq \mathrm{F}_{(9)} \mathrm{C}_{(5)} \mathrm{A}_{(8)} \mathrm{G}_{2}$

## Answer: C

## - Watch Video Solution

36. A drupe develops in
A. Tomato
B. Mango
C. Wheat
D. Pea

Answer: B
37. Flowers are zygomorphic in
A. Datura
B. Mustard
C. Gulmohur
D. Tomato

Answer: C

## - Watch Video Solution

38. Whorled, simple leaves with reticulate venation are
A. China Rose
B. Alstonia
C. Calotropia
D. Neem

## Answer: B

## - Watch Video Solution

39. Which one of the following pairs is wrongly matched while the remaining three are correct ?
A. Bryophyllum-Leaf buds
B. Agave-Bulbils
C. Penicillium-Conidia
D. Water hyacinth-Runner

## Answer: D

## - Watch Video Solution

40. Sweet potato is homologous to
A. Ginger
B. Tumip
C. Potato
D. Colocasia

Answer: B

## - Watch Video Solution

41. Which one of the following diagrams represents the placentation in Dianthus
(1)
A.

B.

(3)

(4)
D.

## Answer: D

## D Watch Video Solution

42. The ovary is hal inferior in flowers of
A. Guava
B. Peach
C. Cucumber
D. Cotton

## - Watch Video Solution

43. The technical term used for the androecium in a
flower of China rose (Hibiscus rosa sinensis ) is
A. Polyadelphous
B. Monadelphous
C. Diadelphous
D. Polyandrous

Answer: B
44. The scutellum observed in a grain of wheat or maize is comparable to which part of the seed in other monocotyledons ?
A. Plumule
B. Cotyledon
C. Endosperm
D. Aleurone layer

Answer: B
45. Keel is characteristic of the flowers of
A. Bean
B. Gulmohur
C. Cassia
D. Calotropis

Answer: A

## D Watch Video Solution

46. In unilocular ovary with a single ovule, the placentation is
A. Axile
B. Marginal
C. Basal
D. Free central

## Answer: C

## - Watch Video Solution

47. The ovary is hal inferior in flowers of
A. Cucumber
B. Guava
C. Plum
D. Brinjal

## Answer: C

## - Watch Video Solution

48. Which one of the following is a xerophytic plant in which the stem is modified into the flat green and succulent structure?
A. Opuntia
B. Casuarina
C. Hydrilla
D. Acacia

Answer: A

## - Watch Video Solution

49. Aestivation of petals in the flower of cotton is correctly shown in
(1)

A.

B.

C.
(3)

D.
(4)


## - Watch Video Solution

50. The correct floral formula of soyabean is :-





## Answer: C

51. Examine the figures (A-D) given below and select the right option out of 1-4 in which all the four structures

A,B,C and D are identified correctly

Structures :

B.
$A \quad B$
C
D

Runner Archegoniophore Synergid Antheridium
C.
$A \quad B$
$C$
D

Offset Antheridiophore Antipodals Oogonium
D.
A
B
C
D

Sucker Seta Megaspore mother cell Gemma cup

## Answer: C

## - Watch Video Solution

52. Consider the following four statements (i),(ii),(iii) and (iv)
(i) In vexillary aestivation, the large posterior petal is
called standard, two lateral ones are called wings and two small anterior petals are termed as keel
(ii) The floral formula for Liliaceae is
$\operatorname{Br} \oplus \bigcap_{1} \mathrm{P}_{(3+3)} \mathrm{A}_{3+3} \underline{G}_{(3)}$
(iii) In pea flower, the stamens are monadelphous
(iv) The floral formula for Solanceae is


The correct statement are
A. A and C
B. A and B
C. B and C
D. C and D

Answer: B

## - Watch Video Solution

53. Vegetative propagation in Pistia occurs by
A. Stolen
B. Offset
C. Runner
D. Sucker

Answer: B

#  <br> $\oplus{ }_{+}^{*} K_{(5)}{ }^{C}(5) A_{5} G_{(2)}$ 

54. 

floral formula of
A. Soybean
B. Sunnhemp
C. Tobacco
D. Tulip

Answer: C

## 55. A fruit developed from hypanthodium inflorescence is

called
A. Sorosis
B. Syconus
C. Caryopsis
D. Hesperidium.

## Answer: B

## - Watch Video Solution

56. Vegetative propagation in mint occurs by :
A. Offset
B. Rhizome
C. Sucker
D. Runner

## Answer: C

## - Watch Video Solution

57. Cotyledons and testa respectively are edible parts in
A. Walnut and tamarind
B. French bean and coconut
C. Cashew nut and litchi
D. Groundnut and pomegranate

## Answer: D

## - Watch Video Solution

58. An example of axile placentation is
A. Dianthus
B. Lemon
C. Marigold
D. Argemone

Answer: B
59. Are the thorn of Bougainvillea and tendril of cucurbita homologous or analogous. What type of evolution has brought such a similarity in them?
A. Retrogressive evolution
B. Analogous organs
C. Homologous organs
D. Vestigial organs

## Answer: C

60. Which of the following fruits is chambered , developed from inferior ovary, and has seeds with succulent testa?
A. Cucumber
B. Pomegranate
C. Orange
D. Guava

## Answer: B

## - Watch Video Solution

61. Dry indehiscent single-seeded fruit formed from bicarpellary syncarpous inferior ovary is
A. Cremocarp
B. Caryopsis
C. Cypsela
D. Berry.

## Answer: C

## - Watch Video Solution

62. Endosperm is completely consumed by the developing embryo in

A. Maize

B. Coconut
C. Castor
D. Pea

## Answer: D

## - Watch Video Solution

63. Replum occurs in the ovary of
A. Pea
B. Lemon
C. Mustard
D. Sunflower

Answer: C

## - Watch Video Solution

64. The fleshy receptacle of syconous of fig encloses a number of
A. Mericarps
B. Achenes
C. Samaras
D. Berries

Answer: B

## 65. Pineapple (ananas) fruit develops from

A. A unilocular flower
B. A multipistillate syncarpous flower
C. A cluster of compactly borne flowers on a common axis
D. A multilocular monocarpellary flower.

## Answer: C

## D Watch Video Solution

66. Aril represents edible part in
A. Custard apple
B. Pomegranate
C. Orange
D. Litchi

## Answer: D

## - Watch Video Solution

67. Pantamerous, actinomorphic flowers and bicarpellar ovary with oblique septa and fruit a capsule or berry are characteristic features of
A. Asteraceae
B. Brassionceae
C. Solanaceae
D. Liliaceae

## Answer: C

## - Watch Video Solution

68. What type of placentation is seen is Sweet Pea ?
A. Basal
B. Axile
C. Free central
D. Marginal

## - Watch Video Solution

69. Which of the following represents the edible part of
fruit of litchi?
A. Pericarp
B. Mesocarp
C. Juicy aril
D. Endocarp

Answer: C
70. Angiosperm to which the largest flower belong is
A. Total root parasite
B. Partial root parasite
C. Total stem parasite
D. Partial stem parasite

## Answer: A

## D Watch Video Solution

71. Clinging roots occure in
A. Screw pine
B. Podostemon
C. Trapa
D. Orchid

## Answer: D

## D Watch Video Solution

72. Pneumatophores are found in
A. The vegetation which is found in marshy and saline
lake
B. The vegetation which is found in acidic soil
C. Xerophytes
D. Epiphytes

## Answer: A

## - Watch Video Solution

73. In a longitudinal section of a root, starting from the tip upward, the four zones occur in the following order
A. Root cap, cell division, cell enlargement, cell maturation
B. Root cap, cell division, cell maturation, cell enlargement
C. Cell division, cell enlargement, cell maturation, root

## cap

D. Cell division, cell maturation, cell entlargement, root cap.

## Answer: A

## - Watch Video Solution

74. A plant bears fruit, has a column of vascular tissue and a tap root system. This plant is a/an
A. Angiosperm and dicot
B. Gymnosperm and dicot
C. Angiosperm and monocot
D. Gymnosperm and monooot

## Answer: A

## - Watch Video Solution

75. Eye of potato is
A. Axiliary buds
B. Accessory bud
C. Adventitious bud
D. Apical bud

## - Watch Video Solution

76. How manty plants among China rose, Ocimum, sunflower, mustard, Alstonia, guava, Calotropis and

Nerium (Olender) have opposite phyllotaxy
A. Two
B. Three
C. Four
D. Five

Answer: B
77. Which plants part is modified into pitcher in pitcher plants?
A. Leaf apex
B. Leaf base
C. Petiole
D. Lamina

Answer: A

- Watch Video Solution

78. A pair of insectivorous plants is
A. Dionaea and Viscum
B. Venus fly trap and Rafflesia
C. Drosera and Rafflesia
D. Nepenthes and bladderwort

## Answer: D

## - Watch Video Solution

79. The ability of the venus fly trap of capture insects is due to
A. Specialized "muscle-like" cells
B. Chemical stimulation by the prey
C. A passive process requiring no special ability of the part of the plant
D. Rapid turgor pressure changes

## Answer: D

## D Watch Video Solution

80. In a cymose inflorescence the main axis
A. Terminates in a flower
B. Has unlimited growth
C. Bears a solitary flower
D. Has unlimited growth but lateral branches end in
flowers

## Answer: A

## - Watch Video Solution

81. Inflorescence is racemose in
A. Soyabean
B. Brinjal
C. Tulip
D. Aloe

Answer: A

## - Watch Video Solution

82. Hypanthodium is
A. Fruit
B. Inflorescence
C. Thalamus
D. Ovary

Answer: B
83. Hair are found in the inflorescense of Zea mays are the modification of:
A. Style
B. Stigma
C. Spathe
D. Filaments

## Answer: A

## - Watch Video Solution

84. Floral features are chiefly used in angiosperms
identification because
A. Flowers can be safely pressed
B. Reproductive parts are more stable and conservative than vegetative parts
C. Flowers are nice to work with
D. Flowers are of various colours

## Answer: B

## D Watch Video Solution

85. Tetradynamous condition of the androecium is a characteristic feature of the family:
A. Cruciferae
B. Malvaceae
C. Solanaceae
D. Liliaceae

## Answer: A

## - Watch Video Solution

86. Anthesis is a phenomenon which refers to
A. Reception of pollen by stigma
B. Formation of pollen
C. Development of anther
D. Opening of flower bud

## - Watch Video Solution

87. Pappus in sunflower family is the modification of
A. Hairs
B. Anthers
C. Calyx
D. Corolla

## Answer: C

88. How many plants in the list given below have composite fruits that develop from an inflorescence?

Walnut, poppy, radish , fig, pineapple, apple, tomato, mulbery
A. Two
B. Three
C. Four
D. Five

Answer: B
89. Which of the following is a true fruit ?
A. Banana
B. Pineapple
C. Apple
D. Pear

Answer: A

- Watch Video Solution

90. Coir is the commercial product of coconut's
A. Endocarp
B. Endosperm
C. Pericarp
D. Mesocarp

## Answer: D

## - Watch Video Solution

91. Aril represents edible part in
A. Mango
B. Apple
C. Banana
D. Litchi

## - Watch Video Solution

92. Which plants will lose its economic value if its furits are produced by induced parthenocarpy?
A. Orange
B. Banana
C. Grape
D. Pomegranate

## Answer: D

# 93. Edible part of coconut is 

A. Endosperm
B. Pericarp
C. Mesocarp
D. Fleshy aril

Answer: A

D Watch Video Solution
94. Geocarpic fruit is
A. Carrot
B. Radish
C. Ground nut
D. Tumip

## Answer: C

## - Watch Video Solution

95. Which is correct pair for edible part ?
A. Tomato-thalamus
B. Maize-cotyledons
C. Guava-mesocarp
D. Date palm-mesocarp

## - Watch Video Solution

96. Edible part of banana is
A. Epicarp
B. Mesocarp and less developed endocarp
C. Endocarp and less developed mesocarp
D. Epicarp and mesocarp

## Answer: C

## - Watch Video Solution

# 97. Edible part of mango is 

A. Mesocarp
B. Epicarp
C. Endocarp
D. Epidermis

## Answer: A

## - Watch Video Solution

98. Geocarpic fruit is
A. Potato
B. Peanut
C. Onion
D. Garlic

## Answer: B

## - Watch Video Solution

99. Juicy hair-like structures observed in the lemon fruit develop form
A. Exocarp
B. Mesocarp
C. Endocarp
D. Mesocarp and endocarp

## Answer: C

## - Watch Video Solution

100. Select correct statement w.r.t. hard walled berry.
A. a) Multiseeded fruit developing from superior ovary.
B. b) Edible part is juicy unicellular hairs
C. c) Develops from $G \overline{3}$
D. d) Develops from $G \underline{3}$

## - Watch Video Solution

101. Scutellum of maize is
A. Outermost layer of endosperm
B. A sheath that protects the radicle
C. The place where the seed is attached to rapha
D. A cotyledon

## Answer: D

## - Watch Video Solution

102. An example of a seed with endosperm, perisperm and caruncle is
A. Castor
B. Cotton
C. Coffee
D. Lily

## Answer: A

## - Watch Video Solution

103. Among flowers of Calotropis, tulip, Sesbania, Asparagus,Colchicine, Sweet, pea, petunia,Indigofera,

Mustard, Soyabean, Tobacco and groundnut how many plants have corolla with valvate aestivation.
A. Five
B. Six
C. Seven
D. Eight

## Answer: C

## - Watch Video Solution

104. Which is expressing right appropriate pairing:
A. Brassicaeae-Sunflower
B. Malvaceae-Cotton
C. Papilionaceae-Catechu
D. Liliaceae-Wheat

## Answer: B

## - Watch Video Solution

105. Bicarpellary gynoecium with oblique ovary occurs in
A. Mustard
B. Banana
C. Pisum
D. Brinjal

## Answer: D

## (D) Watch Video Solution

## Section D Assertion Reason Type Questions

1. Assertion : In head inflorescence, florets are arranged centrifugally.

Reason : There are always two types of florets in head.

## - Watch Video Solution

2. Assertion : Staminal tube is present in Malvaceae.

Reason: It is due to monoadelphous condition.

## - Watch Video Solution

3. A: Prop roots are rope like showing oblique growth.

R:Prop roots are adventitious roots for extra-support and assimilation.

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4. A: The storage region of maize grain is whitish or yellow.
$R$ : it is rich is protein granules.

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5. Assertion : There are two alae in Pisum sativum flower.

Reason : Both alae are covered by largest petal .

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6. A: Corm grows vertically beneath soil surface.

R: It bears nodes, internodes, buds \& green leaves.

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7. In Smilax, stipules are modified into tendrils and leaves
show parallel venation.

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8. A: Androecium of Cucurbita is synandrous.

R: Anthers as well as filaments of stamens are united throughout their whole length.

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9. A: Nucellus remains persistent in the seeds of black pepper.

R: It is haploid parenchymatous tissue.

## D Watch Video Solution

10. A: Epiphyllous roots arise from the margins of leaf
lamina.

R: Epiphyllous roots help in vegetative reproduction.

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## Try Yourself

1. Which of the following is not a part of root system?
A. Root cap
B. Node
C. Root hair
D. Meristematic zone
2. Which of the following is an incorrect statement?
A. Roots are positively geotropic
B. Roots are always postively phototropic
C. Roots are negatively photoropic
D. Both 1 and 2

Answer: B

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3. The radicle elongates and forms
A. Primary root
B. Secondary root
C. Rootlets
D. Tertiary root

## Answer: A

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4. Monocotyledon plants generally contain $\qquad$ .
A. Tap root system
B. Naked seeds
C. Firbrous root system
D. Archegonia

## Answer: C

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5. Which of the following is not a storage root?
A. Tap root of carrot
B. Tap root of turnip
C. Adventitious root of sweet potato
D. Roots of banyan tree

## Answer: D

6. Which of the following is not the main function of the root sytem?
A. Respiration
B. Anchorage
C. Synthesis of plant growth regulators
D. Absorption of water and minerals.

## Answer: A

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7. A root grows in length, which region of the root is responsible for this growth?
A. Region of maturation
B. Root cap, cell division, cell maturation, cell enlargement
C. Meristematic zone
D. Zone of elongation

## Answer: D

## - Watch Video Solution

8. The apex of root is protected by the
A. Root hair
B. Root cap
C. Meristamatic cells
D. Cells present in the region of maturation.

## Answer: B

## - Watch Video Solution

9. Nodes and internodes are present in the
A. Leaf apex
B. Fibrous root
C. Tap root

D. Stem

## Answer: D

## - Watch Video Solution

10. $\qquad$ are modified to form tendrils in cucumber
A. Terminal buds
B. Axiliary buds
C. Throns
D. More than one option is correct.

Answer: B
11. Mark the incorrect match.
A. Offset-Pistia
B. Tendril-Euphorbia
C. Thorn-Citrus
D. Sucker-Pineapple

Answer: B

## D Watch Video Solution

12. Axillary buds in Bougainvilleae get modify into woody,
straight and pointed structure called
A. Suckers
B. Stolons
C. Tendrils
D. Thorns

## Answer: D

## - Watch Video Solution

13. In Chrysanthemum, the lateral branches originate from the
A. Basal and aerial portions of the main stem
B. Apical and underground portions of the main stem
C. Basal and underground portions of the main stem
D. Apical and aerial portions of the main stem.

## Answer: C

## - Watch Video Solution

14. The spirally colled, sensitive structure that provide support to weak plants are
A. Offsets
B. Thorns
C. Tendris
D. Stoions

Answer: C

## - Watch Video Solution

15. The alternate type of phyllotaxy is found in
A. China rose
B. Alstonia
C. Calotropis
D. Guava

## Answer: A

16. Phyllodes are observed in
A. Pisum sativum
B. Allium cepa
C. Allium sativum
D. Australian Acacia

## Answer: D

## D Watch Video Solution

17. Parallel venation occurs in
A. Banana
B. Peepal
C. Hibiscus
D. Mango

## Answer: A

## - Watch Video Solution

18. Incision in the leaf does not reach the midrib in
A. Simple leaf
B. Bipinnately compound leaf
C. Tripinnately compound leaf
D. More than one option is correct.

## - Watch Video Solution

19. What all changes occur when shoot apical meristem
converts into floral meristem?

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20. Racemose and cymose inflorescence

## - Watch Video Solution

21. Superior ovary occurs in
A. Hypogynous flower
B. Pengynous flower
C. Epigynous flower
D. Ray florets of sunflower

## Answer: D

## D Watch Video Solution

22. Which of the following is an accessory organ of flower?
A. Calyx
B. Stamen
C. Gynoecium
D. Carpel

## Answer: A

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23. Differentiate between epigynous and hypogynous
flow. Give one example of each.

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24. Half inferior ovary occurs in the flowers of
A. Mustard
B. Guava
C. Cucumber
D. Plum

## Answer: A

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25. Leaf like structure that protect the flower in bud
stage are called
A. Petals
B. Carpeis
C. Sepals

D. Stamens

## Answer: C

## - Watch Video Solution

26. Calyx having fused sepals is called
A. Polysepalous
B. Polypetalous
C. Gamosepalous
D. Gamopetalous

Answer: D
27. Differentiate between Apocarpous and syncarpous ovary

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28. The individual leaf segment of the corolla is called
A. Petals
B. Sepal
C. Stamen
D. Carpel
29. Which one of the following diagrams represent the placentation in Dianthus?
A. Mustard
B. Garden pea
C. Dianthus
D. Wheat

## Answer: C

# 30. The type of placentation that occurs in sunflower is 

A. Marginal
B. Free central
C. Parietal
D. Basal

Answer: B

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31. Which of the following is an edible fungus ?
A. Epicarp
B. Mesocarp
C. Endocarp
D. Seed

## Answer: B

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32. Assertion:Fruit is the mature or ripened ovary developed after fertilisation.

Reason:Fruit formed without fertilisation of the ovary is
called parthenocarpic fruit.
A. Ovule
B. Ovary
C. Female gametophyte
D. Seed

## Answer: C

## - Watch Video Solution

33. In maize grain, plumule is covered by protective sheath
A. Testa
B. Tegmen
C. Coleoptile

## D. Coleorhiza

## Answer: C

## - Watch Video Solution

34. The small pore present above the hilum at one end of the seed is called

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35. The type of placentation occuring in the individuals of the family Liliaceae is
A. Axile
B. Free central
C. Basal
D. Marginal

## Answer: A

## - Watch Video Solution

36. The type of venation present in the leaves of the individuals belonging to the family Solanaceae is
A. Parallel
B. Furcate
C. Reticulate

## D. Both 1 and 2

## Answer: C

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37. Which of the following plants is used to extract the blue dye?
A. Sunhemp
B. Trifolium
C. Indigofera
D. Pea
38. Coichicine is obtained from
A. Colchicum luteum
B. Colchicum autumnale
C. Asparagus
D. Allium cepa (onion)

Answer: B

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